

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below only for the Examiner's convenience. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please **AMEND** claims 1-4, 6, 7, 16, 18, 20, 21 and 46 in accordance with the following:

Claim 1 (Currently Amended): A recording medium, comprising:

a data area disposed between a lead-in area and a lead-out area, including a user data area to record data, and at least a spare area having a replacement area to store data to replace a defective area occurring in the user data area and position information regarding the defective area; and

a defect management area (~~DMA~~) arranged in at least one of the lead-in area and the lead-out area, to store defect information identifying positions of the defective area and the replacement area.

Claim 2 (Currently Amended): The recording medium of claim 1, wherein the defect information includes defect management information to manage the defect information, and wherein the defect management information is updated in the defect management area (~~DMA~~) every recording operation or in response to a predetermined number of recording operations.

Claim 3 (Currently Amended): The recording medium of claim 2, further comprising a temporary defect management area (~~TDMA~~) arranged in one of the lead-in area and the lead-out area in which temporary management information lastly updated is recorded.

Claim 4 (Currently Amended): The recording medium of claim 2, wherein the defect information includes a space bit map (~~SBM~~) to provide information for differentiating available clusters from unavailable clusters on the recording medium.

Claim 5 (Canceled):

Claim 6 (Currently Amended): The recording medium of claim 1, wherein the replacement area further comprises the position information and state information regarding the defective area are error-correction code (ECC) encoded during ECC encoding of data recorded in the replacement area.

Claim 7 (Currently Amended): The recording medium of claim 4, wherein ECC encoded data and the position information and the state information are error-correction code encoded during ECC encoding of data recorded in the replacement area are recorded in the replacement area.

Claims 8-15 (Canceled):

Claim 16 (Currently Amended): An apparatus, comprising:
a recording/reading unit to record/read data with respect to a recording medium comprising a data area disposed between a lead-in area and a lead-out area, including a user data area and at least a spare area having a replacement area to replace a defective area occurring in the user data area; and a defect management area (DMA) arranged in one of the lead-in area and the lead-out area; and
a controller arranged to control the recording/reading unit to record data for replacing the defective area of the recording medium, and position information regarding the defective area, on the replacement area located in the spare area of the recording medium, and to record defect information identifying positions of the defective area and the replacement area in the defect management area (DMA).

Claim 17 (Canceled):

Claim 18 (Currently Amended): The apparatus of claim 16, wherein the controller controls the recording/reading unit to record defect information lastly recorded in the defect management area (DMA), during a finalizing of the recording medium.

Claim 19 (Canceled):

Claim 20 (Currently Amended): The apparatus of claim 16, wherein the controller

~~controls the recording/reading unit to ECC encode the position information and the replacement area further comprises the state information regarding the defective area with data to be recorded in the replacement area.~~

Claim 21 (Currently Amended): The apparatus of claim 16~~20~~, wherein the controller controls the recording/reading unit to record the position information and the state information are error-correction code encoded during ECC encoding of data recorded in the replacement area and ECC encoded data in the replacement area.

Claims 22-45 (Canceled):

Claim 46 (Currently Amended): A method of managing a defect in an apparatus to reproduce data from a recording medium comprising a data area disposed between a lead-in area and a lead-out area, including a user data area and at least a spare area having a replacement area to replace a defective area occurring in the user data area; and a defect management area (DMA) arranged in at least one of the lead-in area and the lead-out area to record defect information to identify positions of the defective area and the replacement area, and the defect management information to manage the defect information, comprising:
 a reading unit arranged to reproduce data from the recording medium; and
 a controller arranged to control the reading unit to reproduce recording data substituting for a defective area offrom the recording medium by reading the defect information to identify positions of the defective area and the replacement area, and the defect management information in the defect management area on the recording medium, and position information regarding the defective area, in the replacement area located in the spare area;
 recording defect information identifying positions of the defective area and the corresponding replacement area in the defect management area (DMA) of the recording medium; and
 recording wherein the controller controls the reading unit to read the defect information, which is lastly recorded in the defect management area, in the defect management area (DMA), arranged in one of the lead-in area and the lead-out area during a finalizing of the recording medium, the replacement area located in the spare area comprises position information regarding the defective area, which is written together with the data for replacing the defective area.